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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,244	07/09/2001	Gabriel Raviv	29888/36772A	8384
4743	7590	07/28/2004	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606			MARMOR II, CHARLES ALAN	
			ART UNIT	PAPER NUMBER
			3736	
DATE MAILED: 07/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/901,244	RAVIV ET AL.	
	Examiner	Art Unit	
	Charles A. Marmor, II	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 60-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 Apr 2004 and 09 Jul 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment and Terminal Disclaimer filed April 26, 2004. The Examiner acknowledges the amendments to the Specification, the Drawings, the cancellation of claims 1-59 and the addition of new claims 60-72. Claims 60-72 are pending.

Drawings

2. The drawings are objected to because reference sign "24" occurs twice in Figure 3 and each occurrence appears to illustrate distinct elements of the apparatus. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description:

“21” as mentioned at page 7, line 6. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: “54” as included in Figure 3 and “56” as included in Figure 6. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any

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required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 60 is objected to because of the following informalities: in line 1, “which can” apparently should read --adapted to--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 63 and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 63, the claim language renders the claim indefinite. It is unclear whether each of the plurality of annular flanges has a substantially circular shape or merely one of the flanges.

Claim 70 is indefinite because it is unclear whether Applicant is attempting to claim the combination of an ear probe tip and a probe or merely the subcombination of an ear probe tip. Claim 60 recites “an ear probe tip for a probe which can be inserted into an ear canal.” Claim 60 provides no positive recitation of the probe, implying that Applicant is attempting to merely claim the subcombination of the ear probe tip. However, claim 70 uses claim language that indicates that the probe is positively disposed within the tip.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 60-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Baum ('038). Baum teaches an ear probe tip including a body portion **11** having a first end and a second end; a passage **20** formed in the body portion including a surface extending from a first opening at the first end to a second opening at the second end; an outer surface of the body portion; and a plurality of annular flanges **41,42,43** on the outer surface. Each of the plurality of annular flanges has a substantially circular shape and a diameter, where the diameter of adjacent flanges decreases in size from the first end toward the second end (see Fig. 1). The passage has a cylindrical shape. The body portion has a frusto-conical shape (see Fig. 1). The plurality of annular flanges are disposed proximate to the middle portion of the body portion, and each of the plurality of flanges is disposed substantially perpendicular to the body portion. The first opening includes a chamfer (see Fig. 4). The passage has an increased diameter portion **22** adjacent the first opening and an incrementally decreasing diameter from the first end toward the second end. A ring **21** is formed on the outer surface adjacent the first end and the outer surface has an incrementally decreasing diameter from the first end toward the second end **31,32,33**. The first end includes a surface configured to engage a base portion of the probe.

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The claims of the instant application effectively claim the subcombination of an ear probe tip that is intended to be used with a probe having an outer surface, a length to be covered by the probe tip, and a probe end. In order to meet the limitations of the claims, a prior art reference must merely be capable of receiving an appropriately sized probe in the passage through the body portion so that the passage is substantially in contact with the probe along the length to be covered, so that the second opening is proximate the probe end, and so that the second end extends past the probe end a distance sufficient to prevent the probe from contacting the patient's ear yet insufficient to form a portion of the acoustic path from the probe end into the patient's ear canal. The probe tip of Baum meets all of the structural limitations of the claims and is capable of performing the aforementioned intended uses with a probe having appropriate dimensions.

10. Claims 60-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Ouchi et al. ('063). Ouchi et al. teaches an ear probe tip **12** including a body portion (see Fig. 5) having a first end and a second end; a passage **30,50,54** formed in the body portion including a surface extending from a first opening at the first end to a second opening at the second end; an outer surface of the body portion; and a plurality of annular flanges **56,58** on the outer surface. Each of the plurality of annular flanges has a substantially circular shape and a diameter, where the diameter of adjacent flanges decreases in size from the first end toward the second end (see Fig. 5). The passage has a cylindrical shape. The body portion has a frusto-conical shape (see Fig. 5). The plurality of annular flanges are disposed proximate to the middle portion of the body portion, and each of the plurality of flanges is disposed substantially perpendicular to the body portion. The first

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opening includes a chamfer. The passage has an increased diameter portion adjacent the first opening and an incrementally decreasing diameter from the first end toward the second end. A ring 60 is formed on the outer surface adjacent the first end and the outer surface has an incrementally decreasing diameter from the first end toward the second end. The first end includes a surface 62 configured to engage a base portion of the probe.

The claims of the instant application effectively claim the subcombination of an ear probe tip that is intended to be used with a probe having an outer surface, a length to be covered by the probe tip, and a probe end. In order to meet the limitations of the claims, a prior art reference must merely be capable of receiving an appropriately sized probe in the passage through the body portion so that the passage is substantially in contact with the probe along the length to be covered, so that the second opening is proximate the probe end, and so that the second end extends past the probe end a distance sufficient to prevent the probe from contacting the patient's ear yet insufficient to form a portion of the acoustic path from the probe end into the patient's ear canal. The probe tip of Ouchi et al. meets all of the structural limitations of the claims and is capable of performing the aforementioned intended uses with a probe having appropriate dimensions.

11. Claims 60-65 and 70-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Killion et al. ('967). Killion et al. teaches an ear probe tip 30 including a body portion (see Fig. 4A) having a first end and a second end; a passage 33 formed in the body portion including a surface extending from a first opening at the first end to a second opening at the second end; an outer surface of the body portion; and a plurality of annular

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flanges **34A-34C** on the outer surface. Each of the plurality of annular flanges has a substantially circular shape and a diameter, where the diameter of adjacent flanges decreases in size from the first end toward the second end (see Fig. 4A). The passage has a cylindrical shape. The body portion has a frusto-conical shape (see Fig. 4A). The plurality of annular flanges are disposed proximate to the middle portion of the body portion, and each of the plurality of flanges is disposed substantially perpendicular to the body portion. The outer surface has an incrementally decreasing diameter from the first end toward the second end. The first end includes a surface configured to engage a base portion of the probe.

The claims of the instant application effectively claim the subcombination of an ear probe tip that is intended to be used with a probe having an outer surface, a length to be covered by the probe tip, and a probe end. In order to meet the limitations of the claims, a prior art reference must merely be capable of receiving an appropriately sized probe in the passage through the body portion so that the passage is substantially in contact with the probe along the length to be covered, so that the second opening is proximate the probe end, and so that the second end extends past the probe end a distance sufficient to prevent the probe from contacting the patient's ear yet insufficient to form a portion of the acoustic path from the probe end into the patient's ear canal. The probe tip of Killion et al. meets all of the structural limitations of the claims and is capable of performing the aforementioned intended uses with a probe having appropriate dimensions.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 60-65 and 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerouac ('051) in view of Baum ('038).

Kerouac teaches an ear probe tip **12** for use with a probe having an outer surface, a length to be covered by the probe tip, and a probe end. The ear probe tip **12** includes a body portion having a first end and a second end; a passage formed in the body portion including a surface extending from a first opening at the first end to a second opening at the second end; and an outer surface of the body portion. The passage has a cylindrical shape and is configured to be disposed about the probe such that the passage surface is substantially in contact with the probe along the length to be covered and so that the second opening is proximate the probe end. The body portion has a frusto-conical shape with a first end having a surface configured to engage a base portion of the probe. The second end of the probe tip extends past the probe end a distance sufficient to prevent the probe from contacting the patient's ear yet insufficient to form a portion of the acoustic path from the probe end into the patient's ear canal. Kerouac teaches all of the limitations of the claims except that the outer surface of the body portion includes a plurality of annular flanges.

Baum, as discussed hereinabove, teaches that it is known in the art to provide the outer surface of an ear probe tip with a plurality of annular flanges **41,42,43** on the outer

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surface which will engage and become wedged against the surrounding surface portions of the outer ear cavity in order to automatically establish an acoustic seal therewith (col. 4, lines 4-17).

It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide the outer surface of an ear probe tip similar to that of Kerouac with a plurality of annular flanges in view of the teachings of Baum in order to automatically provide an acoustic seal with the outer ear cavity that prevents propagation of sound through the space of the ear cavity surrounding the exterior of the ear probe tip.

Response to Arguments

14. The Examiner acknowledges the Terminal Disclaimer filed April 26, 2004. This Terminal Disclaimer has been accepted and obviates any obviousness-type double patenting rejections in the instant application.

Applicant's arguments with respect to claims 60-72 have been considered but are moot in view of the new ground(s) of rejection. Applicant contends that Rosenbaum et al.; Gunterman; Huntress; Shore et al.; Hakansson; and the combination of Mullin et al. in view of Baum fail to teach or suggest at least one of a plurality of annular flanges disposed on the outer surface of the probe tip; a tip passage that is substantially in contact with the probe end along the length to be covered; and a second opening of the tip disposed proximate to the probe end such that the tip does not form a substantial portion of the acoustic path. These arguments are moot in view of the new grounds of rejection set forth hereinabove.

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As discussed above, claims 60-72 of the present application claim a subcombination of an ear tip probe that is intended to be used with an ear probe. Applicant does not positively claim the ear probe or any particular structure thereof in combination with the ear probe tip. In view of the foregoing, the relationship between the ear probe tip and the probe end recited in the claims merely defines the intended use of the instant invention and cannot be solely relied upon to define the ear probe tip of the instant invention over the prior art of record. A prior art reference meeting the structural limitations of the claimed probe tip that is capable of being used in such a fashion with a given probe having appropriate dimensions will anticipate the pending claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Falco ('821) teaches an ear probe tip having a body portion with a passage therethrough and a plurality of annular flanges disposed on an outer surface of the body portion.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

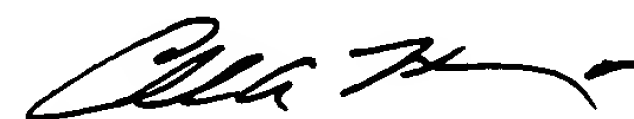
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Marmor, II whose telephone number is (703) 305-3521. The examiner can normally be reached on M-TH (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Beth Jones can be reached on (703) 308-3400. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles A. Marmor, II
Primary Examiner
Art Unit 3736

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July 26, 2004